Company Tracking #: WLOTO-END-18 SECTION 2 - UPDATE TO 201...

State: District of Columbia Filing Company: Texas Life Insurance Company

TOI/Sub-TOI: L07I Individual Life - Whole/L07I.101 Fixed/Indeterminate Premium - Single Life

Product Name: Change to 2017 CSO Section 2 update

Project Name/Number: /

Filing at a Glance

Company: Texas Life Insurance Company

Product Name: Change to 2017 CSO Section 2 update

State: District of Columbia

TOI: L07I Individual Life - Whole

Sub-TOI: L07I.101 Fixed/Indeterminate Premium - Single Life

Filing Type: Form

Date Submitted: 05/03/2018

SERFF Tr Num: METF-131486132 SERFF Status: Closed-APPROVED

State Tr Num:

State Status:

Co Tr Num: WLOTO-END-18 SECTION 2 - UPDATE TO 2017 CSO TABLE

Implementation On Approval

Date Requested:

Author(s): Sande Chaffin

Reviewer(s): John Rielley (primary)

Disposition Date: 05/08/2018
Disposition Status: APPROVED
Implementation Date: 05/08/2018

SERFF Tracking #: METF-131486132 State Tracking #:

Company Tracking #: WLOTO-END-18 SECTION 2 - UPDATE TO 201...

State: District of Columbia Filing Company: Texas Life Insurance Company

TOI/Sub-TOI: L07I Individual Life - Whole/L07I.101 Fixed/Indeterminate Premium - Single Life

Product Name: Change to 2017 CSO Section 2 update

Project Name/Number: /

General Information

Project Name: Status of Filing in Domicile: Not Filed

Project Number: Date Approved in Domicile:

Requested Filing Mode: Review & Approval Domicile Status Comments: We will file with the compact

Explanation for Combination/Other:

Submission Type: New Submission

Market Type: Individual Individual Market Type:

Overall Rate Impact: Filing Status Changed: 05/08/2018

State Status Changed:

Deemer Date: Created By: Sande Chaffin

Submitted By: Sande Chaffin Corresponding Filing Tracking Number:

Filing Description:

Texas Life Insurance Company NAIC #: 69396; FEIN: 74-0940890 800-283-9233

Endorsement to Contract – Form number WLOTO-NI-18, and revision to Section 2-Table of Guaranteed Non-forfeiture Values

This endorsement replaces form number Endorsement-NF-13.

WLOTO-END-18 will serve as notice of the change from the 2001 Commissioners' Standard Ordinary Mortality Table to the 2017 Commissioners' Standard Ordinary Mortality Table.

We have altered the rates on Section 2 Table of Guaranteed Non-forfeiture Values to the requirements of the new 2017 CSO Mortality Table. We have added a revision date to the form number on this page to indicate a change, WLOTO-NI-11 Rev 0518.

The 2017 Commissioners' Standard Ordinary Mortality Table will be effective for new issues not later than January 1, 2020. This change does not apply to in-force policies.

Previously approved forms related to this filing:

FORM NAME, FORM NUMBER, and SERFF TRACKING NUMBER

Policy, WLOTO-NI-11, METF-127048294

Policy Revision, WLOTO-NI-11, METF-127294805

Endorsement, Endorsement-NF-13, MWSG-129090205

To the best of the Company's knowledge, information and belief, the forms submitted are in compliance in all respects with the provisions of the insurance laws, rules and regulations of your state, and contain no provisions previously disapproved by your Department.

This form is in final print. The Company reserves the right to change the appearance, formatting and pagination, but not the text of this form to comply with future changes in production, print systems or web site software and stylistic revisions. No font will be less than a 10-point font size. The Company also reserves the right to change the color and/or weight of hard-copy versions of this form and to correct typographical errors without refiling. In addition, the Company also reserves the right to change the Company logo, Company address and phone number, and Officers' signatures without refiling.

SERFF Tracking #: METF-131486132 State Tracking #:

Company Tracking #: WLOTO-END-18 SECTION 2 - UPDATE TO 201...

State: District of Columbia Filing Company: Texas Life Insurance Company

TOI/Sub-TOI: L07I Individual Life - Whole/L07I.101 Fixed/Indeterminate Premium - Single Life

Product Name: Change to 2017 CSO Section 2 update

Project Name/Number: /

Company and Contact

Filing Contact Information

Sande Chaffin, Sr. Associate, Compliance schaffin@texaslife.com 900 Washington Ave 254-750-2435 [Phone]

Waco, TX 76701

Filing Company Information

Texas Life Insurance Company CoCode: 69396 State of Domicile: Texas P.O. Box 830 Group Code: 4213 Company Type: Life Waco, TX 76703 Group Name: State ID Number:

(800) 283-9233 ext. [Phone] FEIN Number: 74-0940890

Filing Fees

Fee Required? No Retaliatory? No

Fee Explanation:

SERFF Tracking #: METF-131486132 State Tracking #: Company Tracking #: WLOTO-END-18 SECTION 2 - UPDATE
TO 201...

State: District of Columbia Filing Company: Texas Life Insurance Company

TOI/Sub-TOI: L07I Individual Life - Whole/L07I.101 Fixed/Indeterminate Premium - Single Life

Product Name: Change to 2017 CSO Section 2 update

Project Name/Number: /

Correspondence Summary

Dispositions

Status	Created By	Created On	Date Submitted
APPROVED	John Rielley	05/08/2018	05/08/2018

SERFF Tracking #: Company Tracking #: WLOTO-END-18 SECTION 2 - UPDATE METF-131486132 State Tracking #: TO 201...

District of Columbia Filing Company: Texas Life Insurance Company State:

L07I Individual Life - Whole/L07I.101 Fixed/Indeterminate Premium - Single Life Change to 2017 CSO Section 2 update **Product Name:**

Project Name/Number:

Disposition

TOI/Sub-TOI:

Disposition Date: 05/08/2018 Implementation Date: 05/08/2018

Status: APPROVED

Comment:

Rate data does NOT apply to filing.

Schedule	Schedule Item	Schedule Item Status	Public Access
Supporting Document	Statement of Variability	APPROVED	Yes
Supporting Document	Readability Certification	APPROVED	Yes
Supporting Document	Actuarial	RE-FILE UNDER RATES	Yes
Form	Endorsement to Contract	APPROVED	Yes
Form	WLOTO-NI-11, Section 2 COI Table	APPROVED	Yes

SERFF Tracking #: METF-131486132 State Tracking #: Company Tracking #: WLOTO-END-18 SECTION 2 - UPDATE TO 201...

State: District of Columbia Filing Company: Texas Life Insurance Company

TOI/Sub-TOI: L07/ Individual Life - Whole/L07/.101 Fixed/Indeterminate Premium - Single Life

Product Name: Change to 2017 CSO Section 2 update

Project Name/Number: /

Form Schedule

Lead	Form Number:										
Item	Schedule Item	Form	Form	Form	Form	Action Specif	ic	Readability			
No.	Status	Name	Number	Type	Action	Data		Score	Attachments		
1	APPROVED 05/08/2018	Endorsement to Contract	WLOTO- END-18	POL	Revised	Previous Filing Number:	MWSG- 129090205		WLOTO-END-18 Endorsement.pdf		
						Replaced Form Number:	Endorsement- NF-13		·		
2	APPROVED 05/08/2018	WLOTO-NI-11, Section 2 COI Table			WLOTO-NI- 11 Rev0518			Previous Filing Number:	METF- 126556786		Section 2 revised non-icc.pdf
						Replaced Form Number:	WLOTO-NI-11		·		

Form Type Legend:

ADV	Advertising	AEF	Application/Enrollment Form
CER	Certificate	CERA	Certificate Amendment, Insert Page, Endorsement or Rider
DDP	Data/Declaration Pages	FND	Funding Agreement (Annuity, Individual and Group)
MTX	Matrix	NOC	Notice of Coverage
ОТН	Other	OUT	Outline of Coverage
PJK	Policy Jacket	POL	Policy/Contract/Fraternal Certificate
POLA	Policy/Contract/Fraternal Certificate: Amendment, Insert Page, Endorsement or Rider	SCH	Schedule Pages

ENDORSEMENT TO CONTRACT NUMBER [CL0000041]

Effective on the Issue Date, this endorsement is added to and made a part of the Contract referred to above.

Section 7.7 Computation of Values is amended to read:

All values are at least as great as the values required by the state in which this policy was issued. We use the 2017 Commissioners' Standard Ordinary Mortality Table (80/20)(male/female) Non-Smoker U Age Last Birthday, and the 2017 Commissioners' Standard Ordinary Mortality Table (80/20)(male/female) Smoker U Age Last Birthday, to calculate minimum Cash Values. The interest rate used to calculate minimum Cash Values is 4.50% per annum. Reserves are calculated to be at least as great as the values required by the state, but they are not less than the Commissioners' Reserve Valuation Method reserves. Reserves held on this Contract will never be less than the Cash Value.

All computations for reserves assume that premiums are paid annually and that deaths during a Contract Year occur immediately. Any benefits provided by attached riders are excluded from these computations.

Douglas Dixon
President

Mark Sarlitto Secretary

[Mil Smits]

Section - 2 Table of Guaranteed Non-forfeiture Values

End of		Reduced
Contract	Guaranteed	Paid-Up
Year	Cash Value	Insurance
1	\$ 0.00	\$ 0
2	0.00	0
3	600.00	3,800
4	1,500.00	9,000
5	2,500.00	14,400
6	3,500.00	19,500
7	4,500.00	24,100
8	5,600.00	28,900
9	6700.00	33,300
10	7900.00	37,800
11	9,100.00	41,900
12	10,400.00	46,100
13	11,700.00	49,900
14	13,100.00	53,800
15	14,500.00	57,300
16	16,000.00	60,900
17	17600.00	64,500
18	19,200.00	67,800
19	20,800.00	70,800
20	22,600.00	74,100
21	24,300.00	76,800
22	26,200.00	79,900
23	28,100.00	82,600
24	30,100.00	85,300
25	32,200.00	88,000
At Age 60	32,200.00	88,000
At Age 65	43,700.00	100,000

On request, We will provide values for Contract Years not shown.

Guaranteed interest rate - 4.5% a year.

Mortality Table - Commissioners 2017 Standard Ordinary Mortality Table (80/20)(male/female), smoker distinct, age last birthday.

SERFF Tracking #: Company Tracking #: METF-131486132 State Tracking #: WLOTO-END-18 SECTION 2 - UPDATE TO 201...

Texas Life Insurance Company District of Columbia Filing Company: State:

L07I Individual Life - Whole/L07I.101 Fixed/Indeterminate Premium - Single Life Change to 2017 CSO Section 2 update **Product Name:**

Project Name/Number:

TOI/Sub-TOI:

Supporting Document Schedules

Satisfied - Item:	Statement of Variability
Comments:	please see attached
Attachment(s):	Statement of Variability without form number.pdf
Item Status:	APPROVED
Status Date:	05/08/2018
Satisfied - Item:	Readability Certification
Comments:	please see attached
Attachment(s):	Read_Cert for WLOTO and WLOTO-END-18.pdf
Item Status:	APPROVED
Status Date:	05/08/2018
Satisfied - Item:	Actuarial
Comments:	please see attached
Attachment(s):	Actuarial WLOTO-End-18_NONICC.pdf
Item Status:	RE-FILE UNDER RATES
Status Date:	05/08/2018

STATEMENT OF VARIABILITY

The Contract Number (Policy Number) is variable and will change to be the policy number assigned by the Company to each individual policy as it is issued.

The signatures of the company officers are variable to allow for changes in these positions.

We certify that any change or modification to a variable item shall be administered in accordance with the requirements in the variability of information section, including any requirements for prior approval of a change or modification.

VP, Operations

May 2, 2018 Date



CERTIFICATION OF READABILITY

FORMS WLOTO and WLOTO-END-18

This is to certify that the Texas Life Insurance Company forms listed above achieved a Flesch Reading Ease Score of 62.3 when scored together and comply with the requirements of the Insurance Policy Language Simplification Act.

Michael Khoury VP, Operations

Date: May 3, 2018

ACTUARIAL DEMONSTRATION WHOLE LIFE INSURANCE

This is to certify that the attached Actuarial Demonstration for policy form WLOTO-END-18 is a true demonstration of minimum valuation and cash values, if any.

David Groman, ASA, MAAA

Actuary

Signed:

Date: <u>04/27/2018</u>

WHOLE LIFE INSURANCE Actuarial Demonstration of Reserves and Values Calculations

I. <u>Description of Contract Characteristics</u>

Death Benefit: Level \$1,000 per unit

Premiums: Guaranteed annual premium payable to the later of age 65 or 20 years.

Issue Ages: 1 to 80

Nonforfeiture: The policy holder has two options with respect to nonforfeiture, surrender the

policy for its cash value or use the policy's cash value to purchase Reduced Paid-Up insurance (RPU). RPU for this product is essentially the purchase of a single premium whole life policy. Once elected, RPU can then subsequently be

surrendered for its cash value.

Minimum Face Ages 1-49: 10,000 Amounts Ages 50-80: 5,000

II. Basis of Values

Mortality: 2017 CSO Tables Age Last Birthday.

Reserves use the Male/Female, Smoker/Tobacco distinct table for all issue ages.

Cash Values and Reduced Paid-up use the Unisex 80/20 Male/Female, Composite (not smoker or tobacco distinct) table for issue ages 1-17, and the

Smoker/Tobacco distinct table for issue ages greater than 17. Semi-Continuous Functions for Reserves and Cash Values.

Interest: 4.50% for Cash Values and Reduced Paid-Up

3.50% for Reserves

Nonforfeiture Values: Certificate values are minimum values, using the assumptions above and semi-

continuous functions, computed in accordance with the Standard Nonforfeiture

Law, amended in 1980, using the adjusted premium method.

Reserves: For policies with issue dates prior to 1/1/2020 reserves will be calculated in

accordance with Section VM-C of the Valuation Manual initially adopted by the

NAIC on 12/2/2012, along with all subsequent adoptions.

For policies with issue dates on or after 1/1/2020 Texas Life will hold reserves

calculated in accordance with Section VM-20 of said Valuation

Manual if either of the following conditions are true:

a) This product does not pass either of the Stochastic Exclusion Test or the

Deterministic Exclusion Test as defined in said Valuation Manual.

b) This product passes both the Stochastic and Deterministic Exclusion Tests

and Texas Life elects to hold either Stochastic or Deterministic reserves.

If neither (a) nor (b) is true, then reserves will be calculated in accordance with

Section VM-C of said Valuation Manual.

Maturity Age: 121

III. General Formulae

Let k = the premium paying period of the policy and be set as follows for issue age x:

$$x \le 45$$
: $k = 65 - x$
 $x > 45$: $k = 20$

$$A_{x+t} = M_{x+t} / D_{x+t}$$
 and $\overline{A}_{x+t} = \overline{M}_{x+t} / D_{x+t}$

$$\ddot{a}_{x+t:\overline{k-t}|} = (N_{x+t} - N_{x+k}) / D_{x+t}$$

Nonforfeiture Adjusted Premium:

 $DB_t = Death$ Benefit in Policy Year t

$$ELA = (DB_1 + DB_2 + ... + DB_{10}) / 10 = 1000$$

$$\overline{P}_{x}^{NL} = 1000 * \overline{A}_{x} / \ddot{a}_{x:\overline{k|}}$$

$$\overline{P}_x^A = (1000*\overline{A}_x + (.01)*ELA + 1.25*Min \text{ of } \{(.04*ELA) \text{ and } \overline{P}_x^{NL}\}) / \ddot{\alpha}_{x:\overline{k}l}$$

Cash Value Formula:

$$_{t}CV_{x} = 1000 * \overline{A}_{x+t} - \overline{P}_{x}^{A} * \ddot{a}_{x+t:\overline{k-t}|}$$
, $t \le k$
 $_{t}CV_{x} = 1000 * \overline{A}_{x+t}$, $t > k$

Reduced Paid-Up Insurance (rounded to high dollar)

$$_{t}RPU_{x} = _{t}CV_{x} / \overline{A}_{x+t}$$

Let RPUFace = ${}_{t}RPU_{x}$ be the amount of RPU purchased at time x+t.

Let $_nRPUCV_{x+t}$ be the cash value associated with the RPU purchased at time x+t.

$$_{n}RPUCV_{x+t} = RPUFace * \overline{A}_{x+t+n}$$

Valuation Net Premiums:

$$\begin{split} \overline{P}_{x}^{NL} &= 1000 * \overline{A}_{x} / \ddot{a}_{x:\overline{k}|} \\ \beta_{x}^{\text{CRVM}} &= 1000 * \overline{A}_{x+1} / \ddot{a}_{x+1:\overline{k-1}|} \end{split}$$

but not greater than

$$\overline{P}_{x}^{NL} + 1000 * \left(_{19}\overline{P}_{x+1} - c_{x}\right) / \ddot{a}_{x:\overline{k|}}$$

Where
$$c_x = \overline{C}_x / D_x$$

and
$$_{19}\overline{P}_{x+1}=\overline{A}_{x+1}/\ddot{a}_{x+1:\overline{19}|}$$
 ($_{19}\overline{P}_{x+1}$ and A_{x+1} using level \$1000 death benefit C_x 's)

$$\alpha_x^{CRVM} = 1000 * \overline{A}_x - \beta_x^{CRVM} * a_{x:\overline{k}:\overline{l}}$$

Semi-Continuous Terminal Reserves:

$$\begin{array}{ll} {}_{t} \overline{V}_{x} = 0 & ,t = 0 \\ {}_{t} \overline{V}_{x} = 1000 * \overline{A}_{x+t} - \beta_{x}^{CRVM} * \ddot{a}_{x+t:\overline{k-t}|} & ,1 < t \leq k \\ {}_{t} \overline{V}_{x} = 1000 * \overline{A}_{x+t} & ,t > k \end{array}$$

IV. Cash Value Sample Calculations:

Male, Non-Tobacco Issue Age: 35

2017 CSO 80/20 Unisex, ALB, 4.50% Death Benefit per Unit: \$1,000

End Pol Year(t)	DB_{t}	C_{x+t}	M_{x+t}	1000A _{x+t}	D_{x+t}	N_{x+t}	$\ddot{a}_{x+t:\overline{k-t} }$	tCVx	_t RPU _x
1	1,000.00	954.07	142,681.92	149.23	956,096	18,961,663	16.4172	0.00	0
2	1,000.00	1,019.35	141,727.85	155.06	913,991	18,005,567	16.1274	0.00	0
2 3	1,000.00	1,068.36	140,708.50	161.06	873,635	17,091,576	15.8262	6.00	38
4	1,000.00	1,078.26	139,640.14	167.24	834,970	16,217,941	15.5127	15.00	90
5	1,000.00	1,069.49	138,561.89	173.65	797,959	15,382,971	15.1859	25.00	144
6	1,000.00	1,081.72	137,492.40	180.31	762,551	14,585,012	14.8446	35.00	195
7	1,000.00	1,090.66	136,410.68	187.21	728,656	13,822,461	14.4886	45.00	241
8	1,000.00	1,096.59	135,320.01	194.37	696,212	13,093,805	14.1172	56.00	289
9	1,000.00	1,080.22	134,223.42	201.79	665,159	12,397,593	13.7295	67.00	333
10	1,000.00	1,063.07	133,143.21	209.52	635,459	11,732,434	13.3245	79.00	378
11	1,000.00	1,051.18	132,080.14	217.58	607,055	11,096,975	12.9011	91.00	419
12	1,000.00	1,043.85	131,028.96	225.96	579,885	10,489,921	12.4587	104.00	461
13	1,000.00	1,045.83	129,985.11	234.68	553,893	9,910,035	11.9965	117.00	499
14	1,000.00	1,050.62	128,939.29	243.73	529,018	9,356,142	11.5135	131.00	538
15	1,000.00	1,062.64	127,888.67	253.14	505,210	8,827,124	11.0090	145.00	573
16	1,000.00	1,104.37	126,826.03	262.90	482,415	8,321,913	10.4819	160.00	609
17	1,000.00	1,153.46	125,721.66	272.98	460,561	7,839,498	9.9318	176.00	645
18	1,000.00	1,208.48	124,568.20	283.37	439,600	7,378,937	9.3577	192.00	678
19	1,000.00	1,255.79	123,359.71	294.07	419,488	6,939,337	8.7584	208.00	708
20	1,000.00	1,295.92	122,103.92	305.11	400,195	6,519,849	8.1325	226.00	741
21	1,000.00	1,321.89	120,808.00	316.50	381,694	6,119,654	7.4782	243.00	768
22	1,000.00	1,345.95	119,486.11	328.29	363,965	5,737,960	6.7937	262.00	799
23	1,000.00	1,367.98	118,140.16	340.49	346,975	5,373,995	6.0774	281.00	826
24	1,000.00	1,404.09	116,772.18	353.11	330,696	5,027,019	5.3274	301.00	853
25	1,000.00	1,454.93	115,368.09	366.15	315,082	4,696,324	4.5418	322.00	880
26	1,000.00	1,529.56	113,913.16	379.60	300,090	4,381,242	3.7188	344.00	907
27	1,000.00	1,615.37	112,383.60	393.40	285,672	4,081,152	2.8560	366.00	931
28	1,000.00	1,709.71	110,768.23	407.55	271,790	3,795,480	1.9508	389.00	955
29	1,000.00	1,802.53	109,058.52	422.03	258,414	3,523,690	1.0000	413.00	979
30	1,000.00	1,895.16	107,256.00	436.85	245,523	3,265,276	-	437.00	NA
40	1,000.00	3,249.50	83,228.15	601.87	138,282	1,320,701	-	602.00	NA
50	1,000.00	4,623.58	43,690.51	771.46	56,634	322,737	-	772.00	NA
60	1,000.00	1,662.59	6,174.79	882.59	6,996	22,208	-	883.00	NA
70	1,000.00	28.67	59.05	935.64	63	124	-	936.00	NA
80	1,000.00	0.00	0.00	966.93	0	0	-	967.00	NA
86	1,000.00	0.00	0.00	1,000.00	0	0	-	1,000.00	NA

Net Level Premium = 8.59724

Adjusted Prem = 9.83982

All Cx, Mx, and Ax values in the table above are semicontinuous

V. Net Premium Reserve Sample Calculation:

Male, Non-Tobacco Issue Age 35 2017 CSO Male, Non-Tobacco, ALB, 3.50%

Death Benefit per Unit: \$1,000

End Pol Year(t)	DB_t	C_{x+t}	M_{x+t}	1000A _{x+t}	D _{x+t}	N_{x+t}	$\ddot{a}_{x+t:\overline{k-t} }$	Terminal Reserve t
1	1,000	1,005.81	215,486.47	223.23	965,295	22,281,879	18.2501	0.00
2	1,000	1,098.98	214,480.65	230.21	931,663	21,316,584	17.8728	11.59
3	1,000	1,157.76	213,381.67	237.33	899,078	20,384,921	17.4844	23.47
4	1,000	1,185.37	212,223.91	244.63	867,536	19,485,843	17.0837	35.66
5	1,000	1,201.29	211,038.54	252.13	837,034	18,618,307	16.6698	48.22
6	1,000	1,230.41	209,837.25	259.85	807,548	17,781,273	16.2420	61.18
7	1,000	1,263.54	208,606.84	267.78	779,030	16,973,726	15.7999	74.51
8	1,000	1,292.66	207,343.29	275.93	751,444	16,194,696	15.3432	88.25
9	1,000	1,289.51	206,050.63	284.30	724,762	15,443,252	14.8713	102.40
10	1,000	1,284.88	204,761.12	292.94	698,986	14,718,490	14.3828	117.01
11	1,000	1,285.49	203,476.24	301.86	674,086	14,019,504	13.8771	132.11
12	1,000	1,284.34	202,190.75	311.05	650,027	13,345,418	13.3537	147.71
13	1,000	1,293.86	200,906.42	320.54	626,783	12,695,390	12.8119	163.82
14	1,000	1,306.89	199,612.56	330.31	604,316	12,068,607	12.2510	180.46
15	1,000	1,334.36	198,305.67	340.38	582,596	11,464,291	11.6705	197.63
16	1,000	1,391.12	196,971.30	350.74	561,583	10,881,696	11.0697	215.34
17	1,000	1,468.38	195,580.18	361.37	541,225	10,320,113	10.4485	233.56
18	1,000	1,542.96	194,111.80	372.23	521,479	9,778,888	9.8063	252.28
19	1,000	1,614.68	192,568.84	383.35	502,328	9,257,409	9.1420	271.53
20	1,000	1,673.86	190,954.16	394.73	483,754	8,755,081	8.4546	291.32
30	1,000	2,687.25	170,999.07	524.81	325,832	4,665,122	-	524.81
40	1,000	5,068.10	135,194.25	675.48	200,147	1,989,105	-	675.48
50	1,000	7,582.23	71,886.22	819.85	87,682	503,464	-	819.85
60	1,000	2,689.15	9,875.72	908.27	10,873	34,489	-	908.27
70	1,000	46.10	95.58	949.20	101	200	-	949.20
80	1,000	0.01	0.01	974.02	0	0	-	974.02
86	1,000	0.00	0.00	1,000.00	0	0	-	1,000.00

Net Level Premium = 11.62344

Alpha = 0.90436

ELRA = 1000.000 Beta = 12.23190

All Cx, Mx, and Ax values in the table above are semicontinuous

VI. RPU Cash Value Sample Calculations

Male, Non-Tobacco RPU Election Year 10

Issue Age: 35

Death Benefit per Unit: \$1,000

From the Cash Value Exhibit

 $_{10}CV_{35} = 79.00$

RPUFace = $_{10}CV_{35}$ / (Level WL A₄₅) = 378.00

RPU Year	RPU Face	Level WL A _{35+t}	$_{n}RPUCV_{x+t}$
0	378.00	0.20495	77.47
1	378.00	0.21282	80.45
2	378.00	0.22102	83.55
3	378.00	0.22955	86.77
4	378.00	0.23841	90.12
5	378.00	0.24761	93.60
6	378.00	0.25715	97.20
7	378.00	0.26701	100.93
8	378.00	0.27718	104.77
9	378.00	0.28765	108.73
10	378.00	0.29845	112.81

VII. Smoothness Certification

This form provides for cash values that are equal to minimum non-forfeiture based cash values. A sample calculation is provided above. The sample calculation in conjunction with the formulas in this actuarial memorandum demonstrate that these cash values are the same as minimum values. Accordingly, a smoothness demonstration would entail the same formulas as the cash value demonstration with the assumption that the "nonforeiture factor", as defined in the smoothness regulation, would be 1 for all years. Therefore, we are certifying that this product is in compliance with the smoothness requirements of your state.

VIII. Certification of Compliance

I, David Groman, am a member of the American Academy of Actuaries. I hereby certify that to the best of my knowledge this filing complies with the NAIC Standard Nonforfeiture Law for Life Insurance, for all ages, rate classes and durations at which the policy is available.

David Groman, ASA, MAAA

Actuary
Signed:

Date: 04/27/2018

Certification of Compliance with Valuation Manual

I hereby certify the following:

The reserves for forms WLOTO-End-18 will be calculated in accordance with the methodologies and assumptions stipulated in VM-20 of the Valuation Manual (VM) initially adopted by the NAIC on 12/2/2012, along with all subsequent adoptions.

David Groman, ASA, MAAA

Actuary	T
Signed:	I dellaman
Date:	04/27/2018